SOME NEW BOOKS.

Speeches of a Modern Italian Statesman.

Are the special qualities traditionally essential to success in the difficult post of Minister for Foreign Affairs peculiarly necessary properties in the man who holds that highly important office in the Italian Government? It is suggested that ordinary tact, discretion and determination are not sufficient to his occasions; that the southern temperament, with its frequent clashes between popular sentiment and national interest, makes such demands and imposes such restraints upon the Minister as must, more constantly than in other chancelleries, threaten the stability of his cherished policies. Whether or not such special pleading is correct and justified, and "every schoolboy knows" that pressure at home ranks at least as high in the category of a Government's troubles as does the other side's diplomacy, it is not an indispensable factor in the credit justly due from his countrymen and the rest of Europe to the Honorable TOMMASO TITTONI, Foreign Minister of Italy from 1903 to 1909, for the establishment and maintenance of a continuous, undeviating national policy. In *Italy's Foreign and Colonial Policy* (Smith, Elder and Company, London), a collection of Signor Tittoni's speeches in Parliament, translated by Baron BERNARDO QUARANTA DI SAN SEVERINO and dedicated in the English version to ex-Prime Minister Balfour, it is possible to detect not only the guiding principles of this policy but the native wit and wisdom and practical statesmanship of the man who put them into successful operation. As the speeches are in large part responses to the Parliamentary interpellations of his partisan critics and opponents, and as the Minister had the excellent debating habit of repeating in skilful epitome the hostile argument, the collection is a more compendious exposition of the national political personality than might be implicated from its descriptive title.

Minister Tittoni's appreciative sense of the duties and responsibilities of his high office as defender of the national interests, as well as his ability to stem the impetuous currents of popular passion, was demonstrated at the time of the Russo-Japanese war. As Senator Maggiorino Ferraris, editor of *La Nuova Antologia* and from 1893 to 1896 Minister for Posts and Telegraphs, points out in his preface: "When the war broke out sentiment conquered and went over entirely to the Japanese nation, of which we all admire the valor and wonderful progress. But our interests were and are with Russia, as is shown by actual events in Tripoli."

The relations of Russia and Italy are such perhaps as to foster rather the forms of friendship between the two Governments than the fact as between the two peoples. The two lands are so widely separated that there cannot be much popular intercourse. If, of the areas of common interest, the Balkan region presses nearer home to the Italian commons, the Turkish theatre of racial conflict must be more in the daily thought of the multitude of the Czar's subjects. Certainly Tittoni took and forcefully maintained a firm friendly stand in the Italian Parliament of 1908, as again in 1909. The meeting at Racconigi between Czar Nicholas and King Victor Emmanuel III. was of auspicious omen for the Minister's programme. The special service of Tittoni in these and other matters was his professed and actual renunciation of the Machiavellian statecraft which gossip, ever careless of accuracy, fondly imputes to the statesmen of Italy as an ineradicable characteristic. Signor Tittoni did for Italian diplomacy pretty much what John Hay did for our own, made it straightforward and businesslike instead of indirect, ambiguous and evasive. The history of his administration centres about the motto he adopted early and repeated often, in the face of untoward events that furnished political capital for his opponents: "Fidelity to the Triple Alliance, friendship for England and France."

Vienna more than once threatened the peaceful realization of this somewhat idealistic seeming programme, but Minister Tittoni was able to restrain those of his colleagues who were hot to govern Austria as well as their own country. It was at the very outset of his Ministry that the Innsbruck student riots roused the wrath of many Italians. The new Minister, as was to be his wont in many delicate situations, put legal considerations ahead of sentiment. International rights and obligations outranked, both in his vocabulary and in his armory, the impulses of trust or of resentment, the mere whims of the unstable popular mind. The Austrian Government, he said, in forbidding "for reasons of public order and in virtue of Articles II. and VI. of the Austrian law on public gatherings" the opening of the free courses of the university was doing "something which cannot fall under the control or judgment of other States." Deploring the disturbances and the participation of Italian students in them and in their consequences, he affirmed that the Austrian Government had no intention of denying to its Italian subjects an autonomous university: "The Italian Government could not, therefore, according to the most elementary rules which regulate the relations between States, interfere in a matter which has taken place in a foreign State among subjects of that State."

What of the Italian subject who was involved? Prof. de Gubernatis had gone to Innsbruck asking no greater rights and privileges than those granted to the citizens of the foreign State whose Government he was to serve. The Austrian Government had not been derelict in its duty of giving him all possible protection against the disorderly German students. The Austrian Government was embarrassed by a bitter racial hostility among sections of its own citizenship. The Innsbruck rioters had none of its support; its official sentiment was kindly toward Italy. Without making official remonstrances, Italy might have exchanged friendly counsels with Austria, maintaining her own dignity and properly asserting her reasonable resentment, with insistence upon assurances for future non-repetition of the cause for offence; but popular manifestations in Italy had forestalled such moderate remonstrance. If the nation desired a sterner policy, let new men at once be called "to these benches" to execute it. Friendship with peace and honor was his aim, and in such cases he could imagine no worse course than a "middle way" policy, a course "of polemics, of recriminations, of small and ever freshly arising conflicts, of amateur irredentism." Such a policy he believed to be "the worst, the most fraught with danger, the most disastrous for our country."

It is not apparent that Minister Tittoni's constitutional aversion to jingoism, his utter freedom from acts (easily growing into habits) of truculent national self-assertion impaired his ability to command personal respect or endangered in any way the prosperity and the honored position among the nations of the Government whose interests he guarded without any more of pusillanimity than of chauvinism, of truckling than of swashbuckler deportment. There was nothing feebly idealistic about his desire for friendship with all the Powers so far as might comport with the preservation intact of the national honor and the expansive development of Italian resources of material wealth and of character; it was the safe and sane "policy" of peace not "at any price," but at any reasonable price. The outbreak this year of the Great War, with Italy's two partners in the Triple Alliance at grips with her friends by entente, England, France and Russia, placed her in a most peculiar position and displayed those conflicting relations, as also the correlative forces of Italian political personality, in a most remarkable state of equilibrium. Is it too much to say that Italy owes in large part her happy exemption thus far from the present horrible harvest of rampant, regnant militarism to the deep striking wisdom of Minister Tittoni?

Interesting as are the speeches on Italy's foreign and colonial affairs, they have not the direct claim upon American attention that distinguishes the section devoted to emigration. People are, naturally enough, apt to take an unqualifiedly one sided view of this international shifting of population, and the populace of a country whose problem is immigration is apt to think or care mighty little about the other fellow's problem in which the prepositional element of the Volksverschiebung compound word expresses interest in the reverse direction. What we want and what we can get is for us the major and guiding consideration, but our chances of getting what we want are affected if not actually governed by what the immigrant wants, because that is based upon what he is—and that in turn decides what he can give. What he can give is what we can get, and so is the argumentum clausum arrived at. International exchange of any sort is not one sided, like the face of a Chessy cat: the "international mind" must have an eye for reversed perspective.

Foreign Minister Tittoni shows, as one reviews his emigration policy, less spicy than his play in international politics, the same sturdy sense that made him in that greater game a man of mark; particularly the desire and ability to view the board from the side on which his contestant sat. This is the core, the pith of statesmanship. Viewing migration from the home standpoint, he repeatedly pointed out that the Italian Government's problem of emigration had two phases. And these supply two cross-corresponding terms in which we must primarily mould our views of our Italian immigration. In some Italian districts emigration is a useful outlet, a safety valve preventing congestion and social pressure, with danger of explosion. These are the flourishing and wealthy provinces, where agriculture and manufactures thrive, labor is plentiful and population superabundant. In other provinces where conditions are not so happy emigration is the resource of misery seeking relief, caused by poverty and causing by its defection not improvement but increased impoverishment.

Let Signor Tittoni speak: Emigrants, retaining the habits, tastes and tendencies of the homeland in their voluntary exile, help Italian exports; sending home "rivulets of gold," they are "a precious element toward turning in our favor the scales of commercial activity." Government should supervise their exodus, directing them to places where they will prosper best, hence be of greatest use to the fatherland; and, naturally, to the land of their adoption. Italian colonies are most welcome and are happiest in the Argentine. "The State, according to the modern conception of its functions, should not be merely a negative quantity, but an institution for the spreading of culture, civilization and education; therefore it cannot and should not renounce such an important task as the protection of emigration." By way of providing that protection the Minister favored the maintenance of a corps of "emigration attaches" with certain consular powers and the added one of a mobile charter, enabling them to reach their scattered proteges.

Two-fifths of Italian emigration was going to North America; in one recent year alone more than 250,000. Senator Odescalchi, returning from a visit to the United States, reported hostility to the Italian immigrant. The Minister commented discriminatingly: Americans were undoubtedly concerned about the increase, but not merely that from Italy. The objection being based in part upon apprehension of the entrance of the possibly insane or criminal, the United States maintained careful guard at the gate. Some Italians cited this weeding out process as justification for permitting an outgo with no restrictions at the Italian port, but the Minister upheld the practice of a preembarkation examination to save the cost of the return of the rejected.

Other restrictive measures were due to resentment by American labor of the intrusion of alien labor and to similar economic causes. Some Italian authorities favored the making of representations to the United States Government that would compel the obviating of this difficulty, but not by coercion of any kind could Italy hope to prevent the enactment of restrictive measures. The one and only way was so to regulate emigration as to make certain the avoidance of any menace to American economic interests. He believed the American objection centred upon the growth of Italian industrial colonies, and that direction of the stream to the agricultural regions of the South and West would be mutually beneficial. While making all these sensible and essential concessions to the receiving Government Signor Tittoni still urged his Government to keep a firm grip on the coat collars of their emigrating nationals, to encourage the continuance among them of Italian speech and thought, so that generations born abroad should not lose their native moral allegiance. As to citizenship, however, "the Italian Government must neither urge nor dissuade Italians who are abroad from acquiring it" in their new homes, but "reacquisition" must be made easy.

So far the Minister has been broadly theoretical; in discussing the matter of legal protection for Italian emigrants he is eminently practical. Indeed, in considering the case of Italian workmen in America injured in the course of their occupation he displays a thoroughgoing acquaintance with both the spirit of American institutions and the letter of American law that would make a most excellent model for Americans in their lamentably one sided view of international affairs, social and political. Without saying it in so many words, Signor Tittoni evidently felt that South America, in late years at least, offers more attractive inducements to Italian emigration than does this country.

The performance of this little book is bigger and better than its intention. Valuable as it will be found for its record of six years of Italian history in diplomacy, it has the greater value of exhibiting the Italian character in international politics. Signor Tittoni's efforts to maintain so far as he could be a factor in it the European Concert; to promote so far as in his power lay the movement of internal reform in Turkey, and "to inspire the interested Powers, especially Austria-Hungary, with the firm conviction of the loyalty of Italian policy in wanting to maintain the status quo in the Balkan Peninsula"—these policies have been superseded by the crowding events of subsequent years, but the wisdom that inspired them remains influential in the thought and course of the Italian nation in these parlous times of universal upheaval.

Up the Yenisei.

An ancient device of merchant voyaging—the seas were far broader then, and one voyage safely home to port made the successful adventurer a merchant prince—was the annual voyage. There comes into mind the yearly sailing of the Indiamen from the Hugli, a fleet compact of wandering ships from the Spice Islands and Cathay and still more distant Xipangu, all getting under way for the narrow seas to breast the waves in company and with the help of numbers to combat the rover. Across the lonely waste of the Pacific, in these days scarcely less lonely, the great galleon made her annual voyage from Manila to Acapulco. On the Rialto Antonio wagered his flesh pledge on the return of one of the annual argosies of Venice. Even savage navigators have the annual voyage, the fleet of *lakatoi* in New Guinea sets out once every year on its voyage from Port Moresby laden with pots to the still ruder folk across the Gulf of Papua, whence it may return with a freight of sago. In these later times of the ocean ferries and the tramp steamer and the bill of lading and ocean insurance we have somewhat forgotten the more leisurely habit of the sea, the ancient bills of lading expressly disclaiming the "act of God and the King's enemies" and for the rest showing a pious vein in the doxology of these business papers "and so may God send the good ship quick deliverance."

New commerce returns to the habit of the old, the annual voyage is once again proposed in hope of profit. It was to establish the possibility of such an annual voyage that FRIDTJOF NANSEN passed into the Arctic last year on an exploration whose results he has set forth in *Through Siberia, the Land of the Future* (New York: Frederick A. Stokes Company).

The object of this proposed new way of commerce is to exploit the products of that region in Siberia which is tapped by the great Yenisei and whose market centre is found at Yeniseisk at the head of barge navigation on that great river. South of the tundra in that region of Asia is a vast amount of rich land which may become arable when settlement goes further into the wild. At present it is pastoral and is specializing in dairy farming. It promises to become one of the great beef producing regions of the world when capital establishes canneries; just now its staple product is butter. The market for this butter is Copenhagen for the great and well established British trade and Hamburg for more distant export. Between Yeniseisk and Copenhagen the freight charge on the long rail route is prohibitory. Against that fixed charge a shipment of butter from Siberia can be no more than a gambler's wager on the condition of the world's demand for butter, either a great profit or a total loss. Now, of course, the Siberian railway is blocked to such peaceful traffic toward Europe and Yeniseisk has begun shipping its butter to a rapidly rising market by the longer eastward route along the rail to the Pacific termini of the Siberian railway and thence by sea to Europe. The project with which Nansen was associated last year was to cut down this high overhead charge by opening an all water route from Yeniseisk to the ports of the Baltic and of the North Sea. It could be no more than an annual voyage, quite of the ancient type, for while the Yenisei is navigable for half the year the Kara Sea is never wholly free of ice and its navigability is restricted to less than a month. Nansen was invited to the venture by reason of his familiarity with Arctic conditions and his profound knowledge of oceanography. His researches while aboard the steamer Correct and the tug with which he ascended the Yenisei deal with the ice of the Kara Sea and the navigation of the river. From Yeniseisk he travelled in tarantass to Krasnovarsk and made a hurried trip to the Pacific and thence back by rail to Europe. This portion of the journey proves interesting, but the region has been reported at greater length by others who have devoted more time to it. We shall therefore confine our attention to the less known themes of the Kara Sea and the Yenisei River.

I.

The Kara Sea is the first gulf of Siberia when one passes in the Arctic east of the boundary between Europe and Asia. Politically this boundary follows the crest of the Urals, but geographically this continental chain becomes insignificant north of the Arctic Circle and is lost in inconspicuous foothills sloping indistinguishably northward to the ocean. To the rare navigator of these high northern seas the boundary between the two continents is indicated by the Pai-khoi Mountains on the mainland, by Vaigach Island and by the islands of Novaya Zemlya. The eastern shore of this sea lies on the Samoyede Peninsula or Yamal, which is tipped at the north by Byelij Ostrov. This island, at 70 east longitude, marks the beginning of the West Siberian Sea. Immediately east of Byelij Ostrov is the Gulf of Obi, which discharges the waters of the Obi and the Gyda. Separated from the Gulf of Obi by no more than the narrow tip of the Gudanski Peninsula lies Yenisei Bay, which receives the drainage of the extensive Yenisei system. With its western edge blocked by Novaya Zemlya and Vaigach parted by narrow channels from the main the Kara Sea forms a pocket in which is impounded not only the ice which in summer drifts down from the more northern Arctic but also the ice which is driven out in large masses from such great streams as the Obi and the Yenisei.

In dense fog and broken ice Nansen and the Correct on August 10, 1913, were at Kusov Nos in the narrow strait between Vaigach and Novaya Zemlya, therefore at the entrance to the Kara Sea. The next day they found a lead of clear water eastward, which they followed nearly across the sea to Yamal. As they drew near the eastern shore the ice became thicker and thicker, until it proved impassable. It was soon apparent that there was no prospect of crossing the sea in any direct line. Studying the ice blink with trained eyes and searching for lanes in the pack they stood to the south nearly to the head of Kara Bay before turning north under the edge of Yamal. After once engaging the pack they were at no time in ice free water and at times their progress was seriously interrupted. This ice was floating material, ice and hummocks. Once only did they encounter unbroken ice, a rough field some twenty or twenty-five miles in extent and probably a regelation of floes caught on a shallow bank and heaped in confusion by the waves. Skirting this field westerly the same slow progress was made northward until August 21, when they came clear of the ice after spending eleven days in crossing, or rather circling, the Kara Sea, and next day reached Byelij Ostrov. There they entered the ice free West Siberian Sea and encountered no more impediments to navigation until they encountered ice in the mouth of Yenisei Bay. Here the ice was particularly bad, but by August 28 they anchored well up the river at Nosonovski Island and met the up river barges which had come down from Yeniseisk to discharge the cargo of the Correct and to furnish a lading for the return trip. Leaving Nosonovski on the way out on September 10 the Correct found better ice conditions and passed south of Novaya Zemlya into Barents Sea on September 17, thus doing in one week what it had taken nearly three weeks to accomplish when inward bound.

Nansen adds to this record of his personal experience in the Correct a careful digest of all the records of previous attempts to sail the Kara Sea. These show that from year to year there is wide diversity in the ice conditions. In the more recent years he has dealt with the ice record through the medium of temperature and precipitation records from the meteorological stations in regions which might be estimated fairly to reflect these northern conditions. Thereby he establishes a means of interpreting the past winter in terms of summer ice, thus going far to settle in advance the most feasible time for essaying this tedious voyage. He proposes that if the steamship service to the Yenisei is to be established commercially there will be found a great advantage in sending out a pioneer over the Kara Sea in an aeroplane, so that he may report sufficiently in advance upon the ice conditions and may chart the open waterways. With such assistance it appears that it will be possible in every year to make one such voyage toward the end of August, and that by sending in at once a fleet whose tonnage shall correspond to the amount of the produce which can be accumulated in the lower reaches of the Yenisei, a satisfactory trade may be developed. When Yeniseisk is connected with the Siberian railway system such a fleet would find an inward freight of all such goods for central Siberia as are not urgently in demand, and which can wait the annual chance of shipment by water.

II.

When Nansen steamed into the mouth of the Yenisei, thirty miles in width and the banks out of sight on either hand, he passed into the region of big figures in geography. It is fifth in length of the great rivers of the world; measured along its Angará and Selengá tributaries it has a length of some 3,000 miles. Its drainage basin is 970,000 square miles, the seventh in order of magnitude upon the globe. Its sources are in the mountains of northwestern Mongolia at an elevation of a mile in air, its course through the Mongolian plateau is at an elevation of 3,000 feet, at Yeniseisk it is 233 feet above the sea. Through the Angará tributary it drains Lake Baikal, the deepest lake in the world. In the lower, northern reaches the ice goes out of the Yenisei in a flood thirty feet high about the beginning of June. These seasonal freshets exert a great sculpturing effect upon the river banks. Hydrographers have established the equation of erosion as that the power of flowing water to remove stones and gravel is increased by the sixth power of its velocity. This means that if the flood doubles the velocity of a stream the erosion is increased by sixty-four times. The soil through which the lower Yenisei carves its course is structurally of the tundra type. This is usually a product of glaciation, but Nansen has made particular search in his voyage up the river and reports his inability to discover any evidence of glaciers. We must then regard this tundra formation as an alluvion laid down by the rivers, which are now sculpturing it into new forms.

The present fleet on the Yenisei comprises three steam tugs owned by the Government and nine lighters. They owe their presence to the needs of transportation in the war in 1905, when the railway was taxed to its full capacity with troop trains. Originally there were six steamers, but two were wrecked in the breaking up of the ice and one was sold for the navigation of the Obi. In that war year the Government despatched twenty-two steamers across the Kara Sea and, after great delays, they all reached the Yenisei. In the war need the duties at Yeniseisk were removed and there seemed a prospect of the establishment of regular trade; the next year the duties were restored and there was a complete check to the commerce.

Nansen's voyage up the Yenisei from Nosonovski Island to Yeniseisk occupied eighteen days in a motor boat sent for him by the provincial authorities. As far up as Yeniseisk the river is seldom less than a mile and a half in width and frequently broader. But it is shallow for most of its width and incessant care was necessary to find and keep the channel in its meanderings. The northern tundra through which the river flows is mainly a wretched bog as far as the timber line, even within the region of the first larches the soil is mostly morass. In the upper reaches where deciduous trees make their appearance the landscape is more pleasant, for the white birches add their peculiar beauty to the prospect. Day after day the country along the river was dull and flat; it was not until the last few days that the banks showed anything but mud and rapids between rocky banks began to appear.

The expedition was never very far from social amenities, such as they were. Even when struggling to find a way through the ice on the Yamal coast Samoyedes came off in canoes to inspect the voyagers. Nansen came into more comprehending acquaintance with others of this human group on the lower reaches of the Yenisei, where imperfect interpreters were at hand. He does not venture to assign the Samoyedes to their particular place in the scheme of human races; the problem is yet far from solution. They have the reindeer culture; there is nothing to show that it is exotic with them; yet we cannot assign them to the great body of men of reindeer culture, since their spiritual culture and, so far as is known, their linguistic possessions, point quite in another direction. They are a harmless folk, inordinately addicted to strong drink when they can get it, and in their land so far removed from police regulation the traders find a good market. They are rapidly falling before the zymotic diseases which European contact has introduced and bid fair soon to become extinct.

No part of Siberia would seem natural without its exiles, although the draft of political prisoners from Europe across the Urals has been given up. Nansen found a few exiles along the river occupying such position as each has felt inclined to make for himself. Some have taken to the wild and have become robbers in bands, not wholly averse to murder when torture fails to discover the treasure which they seek from travellers, some time to be hunted down by the police when there seems nothing of greater moment to engage the official attention. Other prisoners have been enlarged to take a better chance in industrial life. The attitude of the Siberian free settler toward the prisoner of the Czar is most tolerant. European history seems to have been dropped when the Urals have been surmounted; the convict is regarded as a victim of the marvellous and incomprehensible power of the police to do acts of oppression, and if he behave himself in Siberia he is quite as good as the next man. This indifference of the community applies to criminals as well as to the political exiles, except that the criminal is more likely to continue in Siberia the evil courses which sent him there.

But let no one assume that Siberia, even such remote spots as the valley of the Yenisei, is peopled with none but Samoyedes, police and the criminals they guard. It has a good society of its own, merchants who command respect in the markets of the world, priests and other clergy of spiritual lives and of great scholarship, citizens of wealth and culture. In all this wandering we find that in every town where Nansen's itinerary could be made to include a halt over night the local geographical society was hastily convened and he was invited to lecture before a representative body. The new Siberia is filling up with the best element of old Russia, those who see a future for themselves on new land free from all the old charges which have persisted from the feudal period of the parent states, true to the faith, and to the Czar devoted with an immense patriotic regard, yet none the less natural democrats because pioneers. It is no wonder that Dr. Nansen puts into his title the statement that it is the land of the future.

III.

Several interesting questions of geography engage Dr. Nansen's attention in the course of this work and his notes are worthy of consideration.

While striving to find his way through the Kara Sea he estimated the age of the ice by its dirtiness and makes the comment, "People who have no experience of the polar ice may wonder how this ice can get dirty." All sorts of causes contribute. Even high within the Arctic the air contains floating impurities and every fall of snow brings down some of this burden. When the water freezes it carries in suspension a certain amount of mud borne down into the sea by rivers; the sea is full of minute life. From whatever source derived these impurities of the ice undergo a process of condensation with the result that they become apparent as dirt. When the surface of the ice is exposed to warm rays of the sun it melts to a greater or less degree, the water thus released may be absorbed by the atmosphere or may trickle off the ice surface in drops or slow moving rills. In either case the impurities remain and gradually as the surface melts the impurities of each layer are added to each succeeding layer until the dirty appearance is most marked. This explanation of the phenomenon is proposed by Nansen as more general than Nordenskiold's suggestion that dirty ice is formed from the congelation of snow which has served as a filter for muddy water of the sea or of rivers.

One of the inducements offered when the invitation was extended to Nansen to join this expedition was that he would be able to have a steak from a mammoth discovered the year before in the tundra near Golchikha. Unfortunately the dogs had been gnawing at that mammoth all winter and in the spring a scientific party from Petrograd had carried away all that was left. This explorer did not regard this as wholly unfortunate, for he had been putting in his spare time dreaming of the possibilities of ptomaines thousands of years old and what they might do to his insides. Quite apart from this dietetic question the problem of those frozen mammals of northern Siberia is very intricate, and no satisfactory solution has been presented since the discovery in 1771 of a dozen woolly rhinoceros. The theory of glaciers has been most commonly offered; against this we oppose the fact that there is no evidence of glaciation in Siberia, and even if there had been it is impossible to conceive how the fall of such an animal into a crevasse and his preservation frozen within a block of ice could pass into the wholly different condition of preservation within the frozen soil at some distance below the present surface, for at any point where such a body was partly held in stable earth and partly in fluid ice the rending force would be sufficient to tear the tissues to pieces. Another explanation is that these animals stuck fast in bogs. The objection is that the bog must have frozen immediately before the processes of corruption had time to begin and that the bog must never have thawed, which is inconceivable except upon the basis of some great climatic catastrophe of instant and continuous force for which we have no manner of evidence. The same objection holds as to the theory that these animals were overcome by the snows of some blizzard on the tundra; if the snow ever melted the flesh would decay in the thaw; if the snow never melted it would form a block of ice about the body, whereas in fact these remains are not found in ice but in frozen earth.

"I should, therefore," Nansen writes after disposing of these and other theories, "be more inclined to think it happened in this way. That the animals died a perfectly natural death near a great river in autumn or winter. The ground below them was thawed by their bodily warmth and heavy weight and the animal sank in a little way until the whole of it froze and it was left frozen fast in the ground. In the freshets of next summer it was flooded over, but the cold water was not able to thaw it in the short time, and it was then covered with layers of mud and sand which the flood water brought with it. In this way it was protected from thawing again. Next winter the new layers froze and the next flood brought a fresh deposit on top."

We do not seek to traverse this theory so simply proposed, but it does not explain the cases where the mammoth is found frozen in the erect posture. Without an examination of the literature in the Memoirs of the Imperial Russian Academy of Sciences we may not venture to state how frequently that erect posture is found, but we remember a brilliant type case, in which it was pointed out that the animal must have become fixed in this position while undergoing death and freezing simultaneously.

Nansen recurs to a theory of geophysics which was once proposed and quite satisfactorily disposed of. He has scarcely entered the Yenisei when he remarks the difference in its banks; the flat land on the east is comparatively high and falls abruptly with a steep bank to the river; a steeply sloping beach and relatively deep water outside; the land on the west is strikingly low. The author notes this difference no less than three several times and supplies this explanation:

"There can be no doubt that this is an effect of the earth's rotation, which causes all water flowing in a horizontal direction to have a tendency to go to the right in the northern hemisphere, and this tendency becomes stronger the further north we go. This effect is particularly apparent in such broad rivers as the Yenisei, where the waters within its bed may flow at very different rates of rapidity. It must naturally lead to the river digging out its channel deeper on the right side of its bed, and also to its wearing away the right bank more than the left. In this way the whole river bed has a tendency to move gradually to the right. Now it is clear that when a great river flows through a flat country like northern Siberia the effect of this must be that the river bed is constantly on the move toward the right until it comes upon obstacles which check this movement. The result must be that in the course of ages the river leaves on its left side a flat country, where it formerly had its bed and where it has left its deposits, and on its right it will have higher land into which it has not yet dug its way."

This explanation of the erosion point in the Siberian streams was first suggested by Von Baer and answered by Zoeppritz. Now that it is revived it calls for some attention. Nansen uses this theory of the Yenisei, a river flowing practically in the north direction, therefore effectively at right angles to the direction of the earth's rotation, which it is to be remembered is from west to east. Any north-south stream must offer the minimum water surface to be acted upon by this element of rotation, namely the width of the stream. We likewise find that any such force must be greater at the equator than at any point remote poleward therefrom, despite Nansen's statement to the contrary. We have, next, two considerable bodies of water at the equator, the Atlantic and Pacific Oceans respectively, and the Indian Ocean may be thrown in for good measure though less extensive. These bodies expose a breadth of several thousands of miles to this influence instead of the width of from one and a half to thirty miles of the Yenisei. If this theory be valid we should find the African coast being steadily abraded by the eastward movement of the Atlantic, the coast of Ecuador subject to the erosion of the Pacific. As a matter of fact each body of water has a set to the westward measurable by from four to ten miles the hour. If this be the true explanation of the eastward erosion of the Yenisei it should be equally operative on every north-south river. We have no record that such is the case in the Nile, it has been suggested that the Orinoco is eroding westward, the Mississippi-Missouri we know to have moved westward in the prairie section of its bed, the same is true of the Mackenzie, which is most comparable with the Yenisei in latitude. On the two grounds thus sketched we incline to disagree with Nansen's explanation, the more particularly as he recurs to it in explanation of the difference of the banks of the Amur, in general an east-west stream.

Some Old American Churches.

Although written by an architect and primarily susceptible to classification as a book in architecture, *Early American Churches*, by AYMAR EMBURY II. (Doubleday, Page & Company), is by the limitations of its subject fitted to attract non-professional readers rather than those engaged in the practice of architecture and therefore presumably interested more in the technical detail of the art and its records than in the human history centred in these structures. Early American architecture is neither a very deep study nor a very profitable one, except for its incidental supply of a homely, popular background for historical events. The study of early American church architecture has perhaps more reward for the mere antiquarian grubber for the sake of grubbing in antiquity, especially if his retrospective curiosity happen to turn toward the development of ecclesiastical institutions, than for the technician in design and construction.

And yet the architect-author makes out a fairly convincing case for his predecessors' inventive excellence in this branch of his art: It is "by no means a negligible factor in the world's art development. Its influence upon American art to-day is potent and far reaching, and has even been reflected back upon the European style, so that we continually find in modern European work traces of design which originated in the United States in the eighteenth century." The Colonial or "American Georgian" was more than an imitation; at its furthest from strict originality it was a well engineered adaptation. To "invent," to avoid all reminiscence of the Greek or Gothic, American architects would have had to "forget 2,000 years of inherited tradition." Forms develop with the growth of the resources of ingenuity; the original essence does not perish. Mechanical improvements direct but do not govern art. The red Indians had an autochthonous architecture; the "settlers" were Europeans and could not if they would go back to caveman ideas for a new start.

But, boldly says Mr. Embury, the Colonists developed a manner, call it Georgian if you will, "as different from English Georgian as that is from the Italian styles of the same period." With the "classic order" as base and with their artistic aspirations limited by the nature and extent of their material resources and the "tone" of their surroundings, they evolved a "style" racy of the new nationality. Differentiate as you will the Dutch churches of New Jersey, the Lutheran of Pennsylvania, the English of New England and the South, and still the resemblances are more marked than the variations. In the bulk, compared with contemporary work in England, its most prominent characteristic is its reliance upon line and mass rather than ornament. It is not shallow sentiment that gives to our older church interiors the sense of fitting peace, but a quiet, correct and unostentatious harmony, not more remote from the solemn grandeur of ancient cathedrals than from the baroque churches of eighteenth century Europe.

In applying the architectural elements and forms known to them the Colonial architects showed a keen ingenuity:

> Our early American buildings and the text books of the carpenters who constructed them are filled with detail both animated and vigorous, variants of the classic order before unheard of, and which yet somehow preserve the vital constructive details of the order, although the unessential features have been treated with a freedom which is outside the bent of the present generation. We are, for one thing, too well trained; in our schooldays we acquired a reverence for Vignola which we hardly accord to the Bible, and the use of the Corinthian order with triglyphs and mutules, not infrequent in Colonial work, is now considered as much an offence against taste as an indication of ignorance. To the architects of the Colonial days triglyphs had no God given unities as the Doric column which it behooved no man to sunder.

These artists of an earlier day considered themselves quite free to adapt any entablature to any column so long as proportion was preserved. Friezes and soffits they decorated according to their own taste in device; they even used mutules with holes bored into them instead of pegs projecting, and dared even so far as to arrange the dots in half playful patterns. The pegs or guttæ doubtless had originally structural significance. Though that is long lost, the modern will not let go the relics of an earlier usage in carpenter craft. The Greeks were inventive; so were the Americans.

The earliest houses of worship in the country were mere sheds, and are long since vanished from the face of the earth; but of the second generation of churches, buildings carefully planned to be worthy dwelling places of the Spirit and sancta of devotional exercise, there are numerous surviving examples not scarred by restoration or remodelling. Mr. Embury finds the public buildings, especially the church buildings, of the Colonial era exhibiting a design more homogeneous, more free of sectional differentiation than is the case in the architecture of dwelling houses. And there was less change in the principles of design in all the years between 1638 and 1830 than in the next quarter of a century. If there was in church architecture, as between the North and South, any appreciable difference in respect of Puritan simplicity and aristocratic luxury it is said to have been, in reversal of reasonable expectation, in the direction of ornamentation in the North and severity of design in the South. "Probably," says the author, "the richest and most ornate of all American churches were Christ Church and St. Peter's in Philadelphia, midway between North and South." The regional comparison is not particularly illuminating.

Some of the oldest surviving church edifices are St. Luke's, Smithfield, Va., 1632, a brick building, of which Joseph Bridger was the architect; the Ship Meeting House, so called because it was built of ship's timbers, at Hingham, Mass., 1681; the Quaker Meeting House at Flushing, 1692; "Gloria Dei," Swedish, Philadelphia, 1697; Trinity, Wilmington, Del., and the Dutch Reformed Church at Oakland, N. J., both built of stone in 1698. For the eighteenth century the catalogue is as long as Homer's roll call of the ships.

The one hundred-odd photographic views of churches and their interiors are excellently illustrative.

DAY OF THE QUILL PEN.

Russian Czar's Quill Cutter—The First Envelopes.

We have complained of our fountain pens, but the constant mending required by quill pens must have proved a severe trial in the days when no others were available, says the London *Chronicle*. Alexander I. of Russia thought it necessary to employ a man whose sole duty consisted in cutting pens. He was required to have a supply of not less than 100 quills always ready.

This number was by no means excessive, for Alexander would never use the same pen twice. Even the writing of a signature spoiled a pen, in his opinion, for subsequent use. The quill cutter, who received a salary of £340 a year, accompanied the Czar in all his journeys, including campaigns against Napoleon.

Writing implements changed considerably for the better during Sir Walter Gilbey's long spell of life. "Though quill pens are still in use," he remarks in his "Recollections of Seventy Years," "I remember the time when one seldom saw any other kind. Steel pens in their early days were expensive and ill made, and few people used them. The paper we had seventy years ago may have been partly to blame; it had neither the substance nor the surface we take as a matter of course nowadays.

"I remember when envelopes came into use, and what a boon they were considered after the old system of closing letters with wafers or wax. Before envelopes were invented letters were always written with an eye to the position of the wafer or seal, a blank space being left to correspond with the space where this would be put on the outside, lest the written portion should be torn in opening."

POETRY FROM THE SOIL.

Work in Field Inspires Farmer to Enthuse About Arkansas.

A State song for Arkansas, part of whose lines apply to the profitable farming campaign, has been composed by Lindsay Reese. Mr. Reese has tilled the soil all his life—for more than half a century—and his constant and close association with the fields and the woods has led him to write a number of poems and songs of farm and home that ring true and touch the heart.

'Mid thy fertile hills and vales
Arkansas, Arkansas;
We will hold a thousand rallies
Arkansas, Arkansas!
So now don't you understand
Why you'd better join our band
You can help us sweep the land
Arkansas!

O your climate is so charming
Arkansas, Arkansas
But diversify your farming,
Arkansas, Arkansas.
You'll have lots to eat and wear
With your pantries never bare
And the world your bounty'll share
Arkansas!

For these sayings we beg pardon
Arkansas, Arkansas;
"Raise a cornfield and a garden"
Arkansas, Arkansas;
And your State will be a star,
With a fame to conquer near,
And your name will spread afar,
Arkansas!

We will sing your wondrous story
Arkansas, Arkansas,
You will be the nation's glory,
Arkansas, Arkansas.
You will come into your own,
And be praised wherever known
And the world your greatness shown
Arkansas!

War Changes Guide Books.

One of the multitude of effects of the war is its alteration of the guide books to the Continent, says the Westminster *Gazette*. The majority of these books needed little change for several years in the bulk of their pages. But now—A publisher of guide books says that as regards Belgium, Austria and France there will be wholesale corrections needed. And the end is not in sight, for one may confidently anticipate very startling changes in Germany.

The year books, several of which are now in active preparation, are experiencing similar difficulties. The statistics of various public departments, have been "held up" owing to the enlistment of officials concerned in this work, and when one does not know what a day may bring forth it is impossible to get pages for press.